

Appl. No. 09/672,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

REMARKS/ARGUMENTS

Improper Final Office Action

The Applicant thanks the Examiner and his Supervisor for the teleconference on December 16, 2004, to discuss the propriety of the instant Office Action. As explained by the undersigned, the finality of the Office Action is improper, and the Applicant notes the following:

1.) In the prior Office Action dated March 23, 2004, the Examiner objected to claim 6, but indicated that claim (and others) would be allowable if rewritten in independent form. In response, the Applicant amended claim 1 to include the allowable subject matter of claim 6, thus rendering claim 1 allowable (as well as claims 2-5, 7-10 and 12, which are dependent from claim 1).

2.) In the prior Office Action, the only substantive claim rejections made by the Examiner were based on "applicants prior art in view of Raith . . . and in further view of Jones."

3.) In the instant Office Action, the Examiner rejected claim 1 as being unpatentable over "applicants prior art in view of Raith . . . and in further view of Jones."

4.) In the instant Office Action, the Examiner states that "Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action." The only amendment to claim 1, however, was the inclusion of the subject matter of claim 6, which the Examiner had stated would be allowable. Furthermore, the Examiner's explanation of the rejection of claim 1 is *verbatim* identical to the Examiner's explanation of the rejection of claim 1 in the prior Office Action, before the limitations of claim 6 were added. The Examiner has not provided any additional explanation of why he now believes the subject matter of prior claim 6, now included in claim 1, is unpatentable over "applicants prior art in view of Raith . . . and in further view of Jones." Thus, not only is the Examiner's rejection unsupported by any arguments, but the finality of the Office Action is improper since the Examiner is raising a new basis of rejection which was not necessitated by Applicant's amendment of claim 1.

Appl. No. 09/672,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

Shortly after the first teleconference on December 16 between the undersigned and the Examiner and his Supervisor, the Examiner and Supervisor called the undersigned, and the Supervisor stated that it was possible that other claims indicated as being rejected might be allowable, and requested that the Applicant file a response objecting to the finality of the Office Action, whereupon a new, non-final, Office Action would be issued. Based on that, the Applicant agreed to withhold, at this time, a filing of a petition to the Commissioner. The Applicant, therefore, requests that the Examiner reconsider the application and issue a Notice of Allowance for all claims or issue a non-final Office Action, including support for all substantive claim rejections.

Claim Rejections - 35 U.S.C. § 112

In paragraph 3 of the Office Action, the Examiner rejected claims 1-19 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner rejected claims 2-5, 7-10, 12, 14, and 16 in paragraph 4 for reciting "A method" rather than "The method". Claims 2-5, 7-10, 12, 14, and 16 have been amended to recite "The method". Therefore, the withdrawal of the rejection is respectfully requested.

In paragraph 5 of the Office Action, the Examiner rejected claim 1 for reciting limitations without antecedent basis. Claim 1 has been amended to provide antecedent basis for all recited limitations. Therefore, the withdrawal of the rejection is respectfully requested.

In paragraph 6 of the Office Action, the Examiner rejected claims 3-5 and 7-9 for reciting limitations without antecedent basis. Claims 3-5 and 7-9 have been amended to correct the problems noted by the Examiner, with three exceptions: (1) "said number of radio channels" in line 2 of claim 4 has antecedent basis in claim 1, lines 3-4; (2) "said radio channels" in line 2 of claim 5 has antecedent basis in claim 1, lines 3-4; and (3) "said radio link" in line 1 of claim 7 has antecedent basis in claim 1, line 1. Therefore, the withdrawal of the rejection is respectfully requested.

Appl. No. 09/672,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

The Examiner also noted limitations without proper antecedent basis in claims 10, 13, and the rest of the claims. Claims 10, 13, and the rest of the claims have been amended to provide antecedent basis for all recited limitations. Therefore, the withdrawal of the rejection is respectfully requested.

Claim Rejections - 35 U.S.C. § 103

In paragraph 8 of the Office Action, the Examiner rejected claims 1-5, 7, 8, 10, 11, 15, 17, and 19 under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Raith (WO 97/15131), and further in view of Jones (GB 2,318,252).

Claim 1

Claim 1 was previously amended to include the allowable subject matter of claim 6. The Examiner has now rejected amended claim 1 in view of the same references, without citing where the limitations of now-canceled claim 6 are taught or suggested by the references. The Applicant contends that the limitations of claim 6 (namely, that the first channel coding scheme corresponds to CS1, CS2 or CS3 according to GPRS, and the second channel coding scheme corresponds to CS4 according to GPRS) are not taught or suggested by the cited references. Thus, the Examiner has not established a prima facie case of obviousness, as required by MPEP 2146. Therefore, the withdrawal of the rejection under § 103 and the allowance of claim 1 are respectfully requested.

Claims 11, 15, 17, and 19

With respect to claims 11, 15, 17, and 19, the claimed invention relates to channel frequency hopping systems or methods having four different channel coding schemes. Three of the channel coding schemes append redundant information to the transmitted data while the fourth does not. The coding scheme is selected adaptive to the quality of the radio channel and may be changed during communication. In particular, when the fourth coding scheme is used, the channel is switched from a frequency hopping to a non-frequency hopping channel. The Examiner, recognizing

Appl. No. 09/672,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

that Raith fails to disclose the use of non-frequency hopping channels with a channel coding scheme that does not append redundant information to the transmitted data, has looked to the teachings of Jones. Jones, however, does not cure the deficiency of Raith.

The Examiner notes that Jones discloses moving radio connections that have bad quality from a non frequency-hopping channel to a frequency-hopping channel. Jones, however, teaches that frequency hopping is used to enhance quality for all connections, while for some connections enhanced performance is not needed and they could be assigned to a non-hopping channel (see page 7, lines 30 -34). Moreover, Jones describes a radio system in which there are some channels that must be non-hopping (see page 6, line 32 -page 8, line 3), and it is implicit that these channels are desired to be taken into use as transmission must occur in all timeslots on such a radio bearer (see page 7, line 37 to page 8, line 1). Therefore, applying the teachings of Jones in a system where all channels may be frequency hopping, then frequency hopping should be applied for all channels in order to enhance the quality.

In contrast to Jones, the Applicant's invention as recited in claims 11, 15, 17, and 19 is characterized by non-frequency hopping channels that are assigned to radio links when using a coding scheme that does not append redundant information to the transmitted data. The Applicant's invention is based on the insight that for a channel coding scheme that does not append redundant information to the transmitted data, the quality is improved by use of a non-hopping channel, which Jones clearly teaches away from. Accordingly, the invention in claims 11, 15, 17, and 19 is not obvious over Raith in view of Jones.

Claim 12

In paragraph 9 of the Office Action, the Examiner rejected claim 12 under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Raith and Jones, and further in view of Posti et al. (US 6,406,794). However, claim 12 depends from amended claim 1 and recites further limitations in combination with the

Appl. No. 09/872,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

novel and unobvious elements of claim 1. Therefore, the allowance of claim 12 is requested for the same reasons discussed above for claim 1.

Claim 13

In paragraph 10 of the Office Action, the Examiner rejected claim 13 under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Raith and further in view of Alamouti (US 2003/0133516). With respect to claim 13, the Examiner, recognizing that Raith fails to disclose the use of a channel coding scheme that doesn't append redundant information to the transmitted data when using diversity transmission, has looked to the teachings of Alamouti. The Examiner simply states that Alamouti discloses diversity transmission, and concludes that it would have been obvious to combine the teachings of Raith and Alamouti to arrive at Applicant's claimed invention. The Examiner has not pointed to any teaching or suggestion in Raith or Alamouti to combine their teachings and, therefore, the Examiner has failed to establish a *prima facie* case of obviousness of claim 13. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claim 13 as being obvious over Raith in view of Alamouti.

Claim 14

In paragraph 11 of the Office Action, the Examiner rejected claim 14 under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Raith and Alamouti and further in view of Dent (US 6,151,310). However, claim 14 depends from amended claim 13 and recites further limitations in combination with the novel and unobvious elements of claim 13. Therefore, the allowance of claim 14 is requested for the same reasons discussed above for claim 13.

Additionally, the Applicant contends that Dent is disqualified as prior art under 35 U.S.C. § 103(c). Dent and the instant application were commonly owned at the time the invention was made. MPEP 706.02(I)(1) states:

Appl. No. 09/672,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

Effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention "were at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." This change to 35 U.S.C. 103(c) applies to all utility, design, and plant patent applications filed on or after November 29, 1999, including continuing applications filed under 37 CFR 1.53(b), continued prosecution applications filed under 37 CFR 1.53(d), and reissues.

The instant application was filed on September 29, 2000 and claims priority back to October 1, 1999. Dent issued on November 21, 2000, and thus is a 102(e) type of reference. The instant application is assigned to Telefonaktiebolaget LM Ericsson in an assignment recorded in the USPTO at reel 011182, frame 0278. Dent, as shown on its face, is assigned to Ericsson Inc., a wholly owned subsidiary of Telefonaktiebolaget LM Ericsson.

As a result, all of the requirements of 35 U.S.C. 103(c) have been met, and Dent is disqualified as a prior art reference in the instant application. Therefore, Applicant respectfully requests the withdrawal of the rejection and the issuance of a Notice of Allowance for all pending claims.

Claim 16

In paragraph 12 of the Office Action, the Examiner rejected claim 16 under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Raith and Jones and further in view of Sancho et al. (US 6,778,831). However, claim 16 depends from amended claim 15 and recites further limitations in combination with the novel and unobvious elements of claim 15. Therefore, the allowance of claim 16 is requested for the same reasons discussed above for claim 15.

Allowable Subject Matter

In paragraphs 13-14 of the Office Action, the Examiner objected to claim 9, but stated it would be allowable if rewritten to overcome the § 112 rejections above, and in independent form to include all the limitations of the base claim and any intervening

Appl. No. 09/672,007
Amdt. Dated January 25, 2005
Reply to Office action of October 29, 2004
Attorney Docket No. P12030-US1
EUS/J/P/05-1029

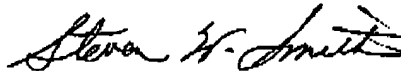
claims. The Applicant has amended claim 9 to overcome the § 112 rejections above. However, the Applicant defers rewriting claim 9 in independent form until receiving further information from the Examiner regarding the claims that the Examiner and his Supervisor indicated in their telephone call may also be allowable.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1-5, 7-17 and 19.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



Steven W. Smith
Registration No. 36,684

Date: January 25, 2005

Ericsson Inc.
6300 Legacy Drive, M/S EVR 1-C-11
Plano, Texas 75024
(972) 583-1572
steve.xl.smith@ericsson.com